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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,837

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Robin R. Gibson

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JONES DAY
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EXAMINER

TAYLOR II, JAMES W

ART UNIT

PAPER NUMBER

4171

MAIL DATE

DELIVERY MODE

05/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,837	Applicant(s) GIBSON ET AL.	
	Examiner James W. Taylor II	Art Unit 4171	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 15-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/15/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Polymer powder coating composition including titanium dioxide and a low-moisture content zeolite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15, 17-27, and 29-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Spiller *et alli* (US 3,676,171) in view of Lepilleur *et alli* (US 6,306,945) or Lepilleur *et alli* in view of Spiller *et alli*.

In claim 1, the applicant claims a powder form of:

- (i) a titanium dioxide,

- (ii) an organic resin (corresponding to “polyvinyl chloride,” Spiller *et alli*, abstract), and
- (iii) a zeolite where the water content less than or equal to 9 weight percent.

Spiller *et alli* teach a polyvinyl chloride powder, intended to be used as a coating. This piece of prior art attempts to overcome failed past attempts to make a polyvinyl chloride powder coating due to the polyvinyl chloride degrading when exposed to high temperatures when coating.

Spiller *et alli* fail to teach components (i) and (iii). The instant application necessitates these components as a pigment and extender, respectively. More particularly, Spiller *et alli*, fail to disclose the moisture content of the zeolites (relevant to all of applicant’s claims), the size of the zeolites (claims 19, 24-25, 31, and 36-37), or the specific nature of the zeolites used (claims 16 and 28)

Lepilleur *et alli* teach both component (i) (c. 11, l. 3; c. 23, t. XIII) and component (iii) (c. 5, ll. 30-35; c. 7, l. 5; c. 23 t. XIII). Lepilleur *et alli* teaches the addition of component (i) as a pigment for aesthetic reasons. Lepilleur *et alli* teach the addition of component (iii) as a heat stabilizer. Furthermore, Lepilleur *et alli* teach that these additives can be used in polyvinyl chloride (c. 3, ll. 11-12; c. 23, t. XIII).

Regarding claims 16 and 28, the applicant further claims:

(iv) wherein the zeolite is selected from zeolite A and zeolite P (corresponding to "zeolite 4A," Lepilleur *et alli*, c. 11, l. 62).

Furthermore the examiner would like to note that zeolite A and P, though more specific, are functionally equivalent to generic "zeolite."

Regarding claims 17-18 and 29-30, Lepilleur *et alli* explain that lower moisture content in their zeolites lead to better heat stability.

Regarding claims 19 and 31, the applicant further claims:

(v) the zeolite has a weight-mean particle size in the range of 0.5-6.0 microns (c. 5, ll. 31-32; c. 12, l. 13).

The examiner notes that although Lepilleur *et alli* disclose the "normal" mean particle size, which is taken to be the number-mean particle size, Lepilleur *et alli* explain that they desire a narrow particle size distribution (c. 5, l. 29). As particle monodispersity gets narrow, weight-mean particle size approaches number-mean particle size, but it will always be greater. Therefore, Lepilleur *et alli*'s weight-mean particle size will be within the claimed range of particle sizes.

Regarding claims 20, 22, 32, and 34, as titanium dioxide is a white pigment, the amount of titanium dioxide is a result-effective variable.

Regarding claim 21, 23, 33, and 35, the applicant further claims:

(vi) a specific amount of the zeolite in the formulation (c. 8, ll. 19-20; c. 23, t. XIII).

Regarding claim 24-25 and 36-37, the applicant further claims:

(vii) the particles of the composition have a particle size from 10 to 75 or 20 to 200 microns respectively.

The Federal Court of Appeals has consistently held that changes in size, without a critical function being attributed to said sizes, is not a patentable distinction over the prior art. See *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955) and *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984).

Regarding claim 38, the examiner notes the applicant has only claimed forming a mixture. There are no limitations here beyond a method of making. However, if the composition is obvious, then the general and most generic method of making the composition is also obvious as the composition had to be made.

Spiller *et alli* could be modified by Lepilleur *et alli*, adding components (i) and (iii) to its powder formulation. Hence at the time of invention, it would have been obvious to one of ordinary skill in the art to modify Spiller *et alli*'s powder formulation by adding components (i) and (iii) from Lepilleur *et alli* to create a powder coating that will contain both a pigment and be more heat stable.

Ergo, it further would have been obvious at the time of invention to limit the zeolites' moisture content to less moisture and remove as much water as realistically feasible; it further would have been obvious to change the concentration of titanium dioxide to control the color of the powder coating's result, and it further would have been obvious to change the particle size of the overall composition.

Alternatively, Lepilleur *et alli* could act as the main reference. It teaches or allows one to obviously conclude all of the limitations above except the powder form, which it fails to teach.

Spiller *et alli* could modify Lepilleur *et alli*'s composition so that Lepilleur *et alli*'s composition was in the powder form instead of a solvated phase. Therefore, it would have been obvious at the time of the invention to modify Spiller *et alli*'s composition with Lepilleur *et alli*'s composition to obtain the instant claimed invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Taylor II whose telephone number is (571)270-5457. The examiner can normally be reached on 7:30 am to 5:00 pm (off every other Friday).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 4171

James W Taylor II
Examiner
Art Unit 4171

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